## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

- 1. (Original) In a data processing system comprising a processor and data storage means for storing data representative of the price evolution of a plurality of stock options over a time period, a method for analyzing the characteristics of sub-time periods of the time period where a change of trend of the price evolution occurs, the method comprising the steps of:
- a. for each sub-time period, aggregating data associated with each stock option by creating a standard description of the stock option's price;
- b. for each sub-time period, converting the standard description of each stock
   option's price into a candlestick pattern chosen among a predetermined typology of a
   plurality of candlestick patterns;
- c. for each sub-time period and for each stock option, comparing the standard description of the current sub-time period to the standard description of the previous sub-time period, and allocating a comparison code, the comparison code being chosen among a predetermined typology of a plurality of comparison codes;



- d. using each standard description created in step (a) for marking each subtime period of each stock option with a trend indicator; and
- e. applying an exploratory data analysis method on the results obtained in steps (b), (c) and (d) for each stock option to determine a set of characteristics of the subtime periods for the plurality of stock options.
- 2. (Original) The method of claim 1 further comprising a first step before step(a) of collecting data at regular time intervals over the time period.
- 3. (Original) The method of claim 1 wherein the standard description comprises a set of price values (open, close, low, high) describing the price evolution of each stock option within the sub-time period.
  - 4. (Original) The method of claim 1 wherein the sub-time period is one day.
- 5. (Original) The method of claim 1 wherein steps (b), (c) and (d) are processed simultaneously.
- 6. (Original) The method of claim 1 wherein step (d) is processed using a regression analysis method.
- 7. (Original) The method of claim 1 wherein step (d) is processed using an image analysis detection method.

- 8. (Original) The method of claim 1 wherein the data collected are representative of the evolution of a stock option parameter other than the stock option's price.
- 9. (Original) A system for analyzing the characteristics of sub-time periods of a time period over which a change of trend of a price evolution of a plurality of stock options occurs, comprising:
- means for storing data representative of the price evolution of the plurality of stock options,
- means for aggregating the data associated with each stock option and for creating for each stock option a standard description of the stock option's price for each sub-time period,
- means for converting each standard description into a candlestick pattern being chosen among a predetermined typology of a plurality of candlestick patterns,
- means for comparing the standard description of each stock option over a
  current sub-time period to the standard description of the respective stock option over the
  previous sub-time period, and allocating a comparison code, the comparison code being
  chosen among a predetermined typology of a plurality of comparison codes,
- means for marking each sub-time period with a trend indicator using the standard description of each stock option, and



- means for merging the output of the converting means, the output of the
   comparing means and the output marking means, to generate a set of characteristics of the
   sub-time periods for the plurality of stock options.
- 10. (Original) A system according to claim 9 wherein the means for generating the set of characteristics further comprise means for operating an exploratory data analysis method.
- 11. (Original) A system according to claim 9 further comprising means for collecting the data representative of the price evolution of the plurality of stock options at regular time intervals over the time period.
- 12. (Original) The system according to claim 9 further comprising means for simultaneously operating the converting means, the comparing means and the marking means.
- 13. (Original) The system according to claims 9 wherein the data collected are representative of the evolution of a stock option parameter other than the stock option's price.
- 14. (Original) In a data processing system comprising data storage means for storing historical data representative of the price evolution of a plurality of stock options over a time period, a computer program product comprising a program configured to perform a method for automatically analyzing characteristics of sub-time periods of the



time period in which a change of trend of price evolution occurs, the method comprising the steps of

- a. for each sub-time period, aggregating data associated with each stock option by creating a standard description of the stock option's price;
- b. for each sub-time period, converting the standard description of each stock option's price into a candlestick pattern chosen among a predetermined typology of a plurality of candlestick patterns;
- c. for each sub-time period and for each stock option, comparing the standard description of the current sub-time period to the standard description of the previous sub-time period, and allocating a comparison code, the comparison code being chosen among a predetermined typology of a plurality of comparison codes;
- d. using each standard description created in step (a) for marking each sub time period of each stock option with a trend indicator; and
- e. applying an exploratory data analysis method on the results obtained on steps (b), (c) and (d) for each stock option to determine a set of characteristics of the subtime periods for the plurality of stock options.